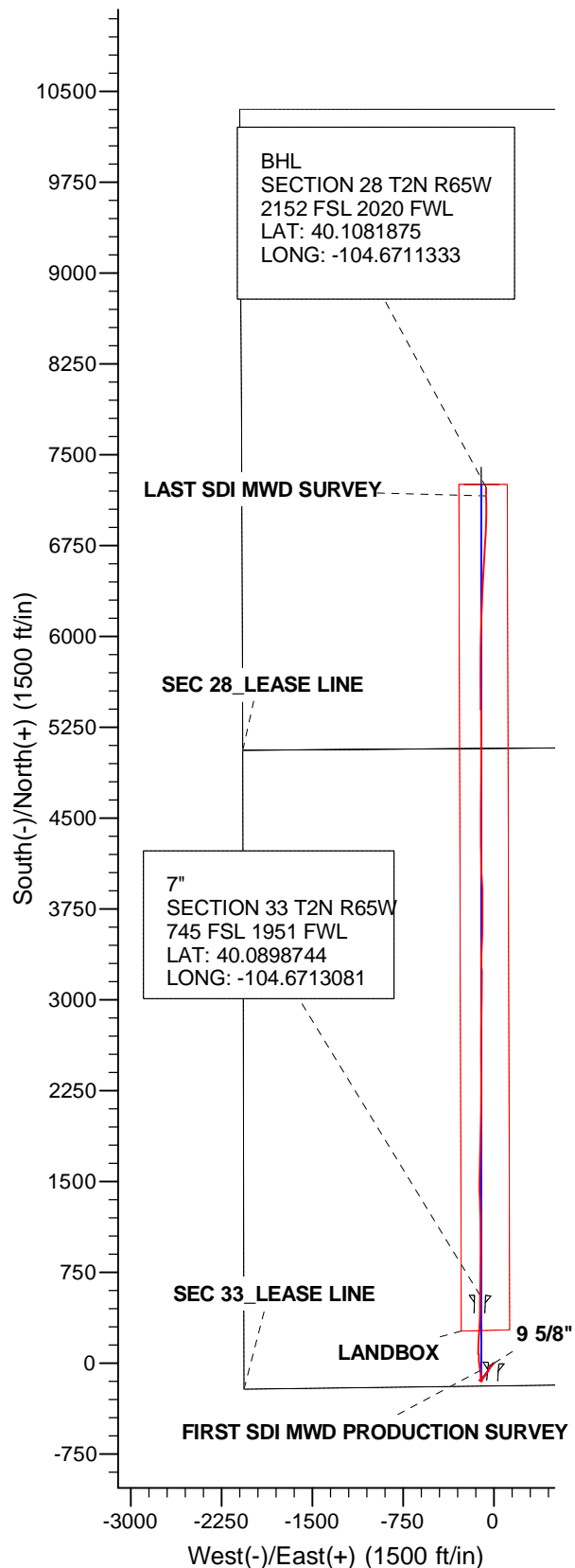
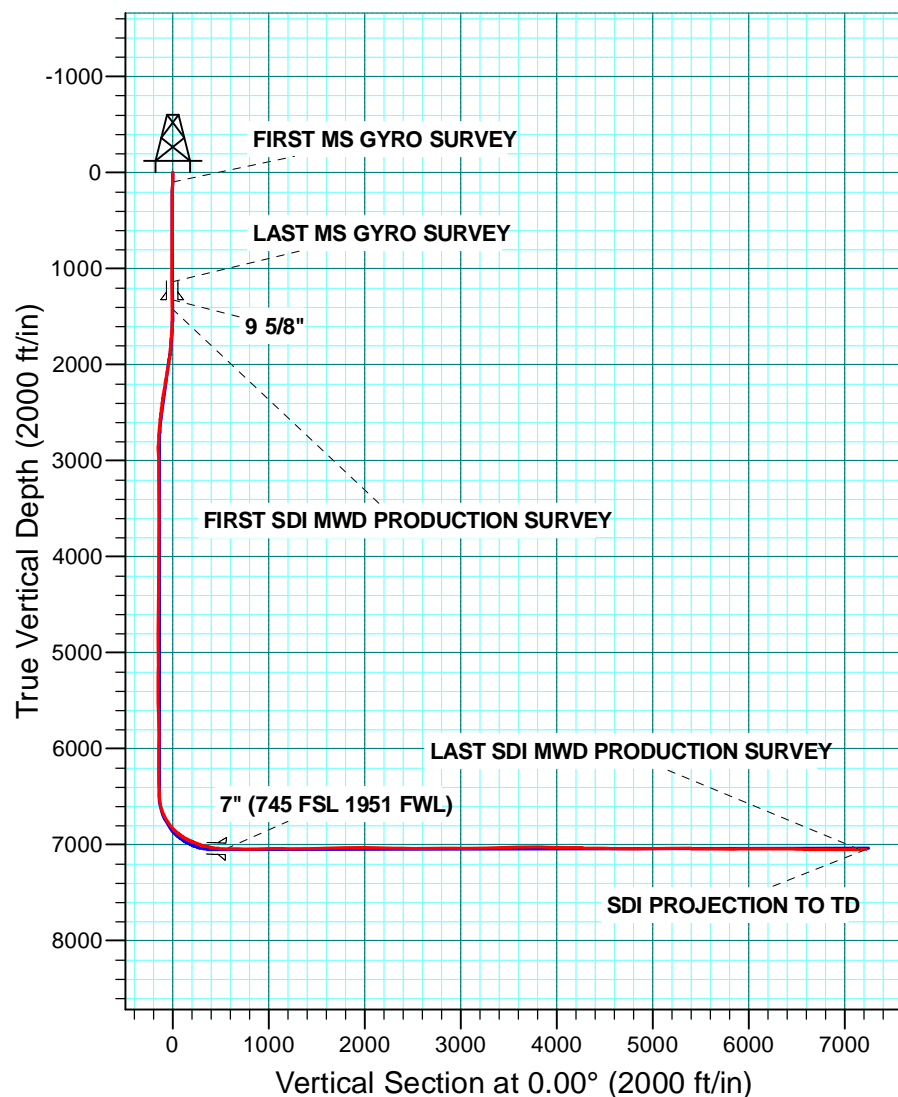


WELL DETAILS: GITTLEIN 29N-28HZ

GL 4911 & KB 25 @ 4936.00ft (HP 311)

| +N/-S | +E/-W | Northing | Easting | Latitude | Longitude |
|-------|-------|------------|------------|------------|--------------|
| 0.00 | 0.00 | 1276114.66 | 3231969.37 | 40.0883490 | -104.6709060 |





US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

GITTLEIN 36-33HZ PAD

GITTLEIN 29N-28HZ

OH

Design: OH

Standard Survey Report

30 September, 2013

| | | | |
|------------------|-----------------------------|-------------------------------------|--------------------------------------|
| Company: | US ROCKIES REGION PLANNING | Local Co-ordinate Reference: | Well GITTLEIN 29N-28HZ |
| Project: | COLORADO NORTHERN ZONE - 83 | TVD Reference: | GL 4911 & KB 25 @ 4936.00ft (HP 311) |
| Site: | GITTLEIN 36-33HZ PAD | MD Reference: | GL 4911 & KB 25 @ 4936.00ft (HP 311) |
| Well: | GITTLEIN 29N-28HZ | North Reference: | True |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | Database: | Denver Sales Office |

| | | | |
|--------------------|--|----------------------|----------------|
| Project | COLORADO NORTHERN ZONE - 83, KERR MCGEE OIL & GAS ONSHORE LP | | |
| Map System: | US State Plane 1983 | System Datum: | Mean Sea Level |
| Geo Datum: | North American Datum 1983 | | |
| Map Zone: | Colorado Northern Zone | | |

| | | | | | |
|-----------------------|--|--------------|-------------------|-------------------|--------------|
| Site | GITTLEIN 36-33HZ PAD, SESW SEC 33 T2N R65W | | | | |
| Site Position: | | Northing: | 1,276,114.66 usft | Latitude: | 40.0883490 |
| From: | Lat/Long | Easting: | 3,231,969.38 usft | Longitude: | -104.6709060 |
| Position Uncertainty: | 0.00 ft | Slot Radius: | 13.200 in | Grid Convergence: | 0.54 ° |

| Well | GITTLEIN 29N-28HZ, 191 FSL 2061 FWL | | | | | |
|----------------------|-------------------------------------|---------|---------------------|-------------------|---------------|--------------|
| Well Position | +N/-S | 0.00 ft | Northing: | 1,276,114.66 usft | Latitude: | 40.0883490 |
| | +E/-W | 0.00 ft | Easting: | 3,231,969.38 usft | Longitude: | -104.6709060 |
| Position Uncertainty | | 0.00 ft | Wellhead Elevation: | ft | Ground Level: | 4,911.00 ft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | OH | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | BGGM2013 | 9/3/2013 | 8.52 | 66.73 | 52,670 |

| | | | | | |
|--------------------------|------------------------------|-------------------|-------------------|----------------------|------|
| Design | OH | | | | |
| Audit Notes: | | | | | |
| Version: | 1.0 | Phase: | ACTUAL | Tie On Depth: | 0.00 |
| Vertical Section: | Depth From (TVD) (ft) | +N/-S (ft) | +E/-W (ft) | Direction (°) | |
| | 0.00 | 0.00 | 0.00 | | 0.00 |

| | | | | | |
|-----------------------|----------------|-----------------------------------|-------------------|--|--|
| Survey Program | Date | 9/30/2013 | | | |
| From (ft) | To (ft) | Survey (Wellbore) | Tool Name | Description | |
| 100.00 | 1,140.00 | Survey #1 MS GYRO (OH) | NS-GYRO-MS | North sensing gyrocompassing m/s | |
| 1,414.00 | 14,164.00 | Survey #2 SDI MWD PRODUCTION (OH) | SDI_MWD+CRUST_1.0 | SDI MWD + Crustal anomaly, Version 1.0 | |

| | | | | | | | | | | |
|-----------------------------|------------------------|--------------------|----------------------------|-------------------|-------------------|------------------------------|--------------------------------|-------------------------------|------------------------------|--|
| Survey | | | | | | | | | | |
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 100.00 | 0.29 | 150.78 | 100.00 | -0.22 | 0.12 | -0.22 | 0.29 | 0.29 | 0.00 | |
| FIRST MS GYRO SURVEY | | | | | | | | | | |
| 200.00 | 0.35 | 169.15 | 200.00 | -0.74 | 0.30 | -0.74 | 0.12 | 0.06 | 18.37 | |
| 300.00 | 0.16 | 157.72 | 300.00 | -1.17 | 0.42 | -1.17 | 0.20 | -0.19 | -11.43 | |
| 400.00 | 0.29 | 148.53 | 400.00 | -1.52 | 0.60 | -1.52 | 0.13 | 0.13 | -9.19 | |
| 500.00 | 0.30 | 193.16 | 499.99 | -1.99 | 0.67 | -1.99 | 0.22 | 0.01 | 44.63 | |
| 600.00 | 0.38 | 179.76 | 599.99 | -2.57 | 0.61 | -2.57 | 0.11 | 0.08 | -13.40 | |
| 700.00 | 0.19 | 251.14 | 699.99 | -2.96 | 0.46 | -2.96 | 0.37 | -0.19 | 71.38 | |
| 800.00 | 0.18 | 142.07 | 799.99 | -3.14 | 0.40 | -3.14 | 0.30 | -0.01 | -109.07 | |

| | | | |
|------------------|-----------------------------|-------------------------------------|--------------------------------------|
| Company: | US ROCKIES REGION PLANNING | Local Co-ordinate Reference: | Well GITTLEIN 29N-28HZ |
| Project: | COLORADO NORTHERN ZONE - 83 | TVD Reference: | GL 4911 & KB 25 @ 4936.00ft (HP 311) |
| Site: | GITTLEIN 36-33HZ PAD | MD Reference: | GL 4911 & KB 25 @ 4936.00ft (HP 311) |
| Well: | GITTLEIN 29N-28HZ | North Reference: | True |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | Database: | Denver Sales Office |

| Survey | | | | | | | | | |
|--|-----------------|-------------|---------------------|------------|------------|-----------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 900.00 | 0.09 | 145.71 | 899.99 | -3.32 | 0.54 | -3.32 | 0.09 | -0.09 | 3.64 |
| 1,000.00 | 0.21 | 290.85 | 999.99 | -3.32 | 0.41 | -3.32 | 0.29 | 0.12 | 145.14 |
| 1,100.00 | 0.15 | 268.47 | 1,099.99 | -3.26 | 0.11 | -3.26 | 0.09 | -0.06 | -22.38 |
| 1,140.00 | 0.66 | 359.16 | 1,139.99 | -3.03 | 0.05 | -3.03 | 1.70 | 1.28 | 226.73 |
| LAST MS GYRO SURVEY | | | | | | | | | |
| 1,326.00 | 0.17 | 4.22 | 1,325.98 | -1.69 | 0.06 | -1.69 | 0.27 | -0.26 | 2.72 |
| 9 5/8" | | | | | | | | | |
| 1,414.00 | 0.07 | 161.07 | 1,413.98 | -1.61 | 0.09 | -1.61 | 0.27 | -0.11 | 178.24 |
| FIRST SDI MWD PRODUCTION SURVEY | | | | | | | | | |
| 1,506.00 | 1.51 | 222.69 | 1,505.97 | -2.56 | -0.72 | -2.56 | 1.61 | 1.57 | 66.98 |
| 1,597.00 | 4.31 | 228.98 | 1,596.85 | -5.68 | -4.11 | -5.68 | 3.09 | 3.08 | 6.91 |
| 1,689.00 | 4.50 | 229.32 | 1,688.58 | -10.31 | -9.46 | -10.31 | 0.21 | 0.21 | 0.37 |
| 1,780.00 | 6.70 | 225.50 | 1,779.14 | -16.35 | -15.95 | -16.35 | 2.45 | 2.42 | -4.20 |
| 1,872.00 | 7.42 | 215.04 | 1,870.44 | -24.98 | -23.19 | -24.98 | 1.60 | 0.78 | -11.37 |
| 1,964.00 | 9.35 | 210.58 | 1,961.45 | -36.28 | -30.40 | -36.28 | 2.21 | 2.10 | -4.85 |
| 2,056.00 | 10.57 | 207.35 | 2,052.07 | -50.21 | -38.08 | -50.21 | 1.46 | 1.33 | -3.51 |
| 2,147.00 | 11.76 | 208.93 | 2,141.34 | -65.74 | -46.40 | -65.74 | 1.35 | 1.31 | 1.74 |
| 2,239.00 | 10.88 | 213.53 | 2,231.55 | -81.18 | -55.74 | -81.18 | 1.37 | -0.96 | 5.00 |
| 2,331.00 | 11.03 | 209.91 | 2,321.88 | -96.05 | -64.92 | -96.05 | 0.77 | 0.16 | -3.93 |
| 2,423.00 | 9.39 | 224.14 | 2,412.43 | -109.07 | -74.54 | -109.07 | 3.26 | -1.78 | 15.47 |
| 2,514.00 | 9.07 | 224.40 | 2,502.26 | -119.52 | -84.73 | -119.52 | 0.35 | -0.35 | 0.29 |
| 2,606.00 | 6.53 | 204.73 | 2,593.41 | -129.46 | -91.99 | -129.46 | 3.97 | -2.76 | -21.38 |
| 2,698.00 | 5.34 | 202.78 | 2,684.92 | -138.15 | -95.84 | -138.15 | 1.31 | -1.29 | -2.12 |
| 2,793.00 | 3.79 | 224.27 | 2,779.62 | -144.48 | -99.74 | -144.48 | 2.40 | -1.63 | 22.62 |
| 2,887.00 | 2.78 | 247.40 | 2,873.47 | -147.58 | -104.01 | -147.58 | 1.75 | -1.07 | 24.61 |
| 2,982.00 | 3.79 | 328.30 | 2,968.35 | -145.79 | -107.79 | -145.79 | 4.56 | 1.06 | 85.16 |
| 3,076.00 | 1.01 | 325.32 | 3,062.26 | -142.47 | -109.90 | -142.47 | 2.96 | -2.96 | -3.17 |
| 3,171.00 | 0.76 | 1.29 | 3,157.25 | -141.15 | -110.36 | -141.15 | 0.63 | -0.26 | 37.86 |
| 3,265.00 | 0.39 | 255.27 | 3,251.25 | -140.61 | -110.65 | -140.61 | 1.01 | -0.39 | -112.79 |
| 3,359.00 | 0.60 | 299.67 | 3,345.25 | -140.45 | -111.39 | -140.45 | 0.45 | 0.22 | 47.23 |
| 3,548.00 | 0.21 | 341.65 | 3,534.24 | -139.63 | -112.36 | -139.63 | 0.25 | -0.21 | 22.21 |
| 3,642.00 | 0.67 | 85.00 | 3,628.24 | -139.42 | -111.87 | -139.42 | 0.79 | 0.49 | 109.95 |
| 3,831.00 | 0.42 | 134.22 | 3,817.23 | -139.80 | -110.27 | -139.80 | 0.27 | -0.13 | 26.04 |
| 3,926.00 | 0.53 | 131.02 | 3,912.23 | -140.33 | -109.69 | -140.33 | 0.12 | 0.12 | -3.37 |
| 4,020.00 | 0.45 | 166.71 | 4,006.22 | -140.98 | -109.28 | -140.98 | 0.33 | -0.09 | 37.97 |
| 4,114.00 | 0.47 | 151.22 | 4,100.22 | -141.67 | -109.00 | -141.67 | 0.13 | 0.02 | -16.48 |
| 4,208.00 | 0.24 | 126.36 | 4,194.22 | -142.13 | -108.66 | -142.13 | 0.29 | -0.24 | -26.45 |
| 4,303.00 | 0.84 | 107.66 | 4,289.22 | -142.46 | -107.84 | -142.46 | 0.65 | 0.63 | -19.68 |
| 4,397.00 | 1.14 | 106.27 | 4,383.20 | -142.93 | -106.28 | -142.93 | 0.32 | 0.32 | -1.48 |
| 4,491.00 | 1.18 | 128.71 | 4,477.18 | -143.80 | -104.63 | -143.80 | 0.48 | 0.04 | 23.87 |
| 4,586.00 | 1.68 | 121.43 | 4,572.15 | -145.13 | -102.68 | -145.13 | 0.56 | 0.53 | -7.66 |
| 4,680.00 | 1.91 | 114.07 | 4,666.11 | -146.49 | -100.07 | -146.49 | 0.35 | 0.24 | -7.83 |
| 4,775.00 | 1.91 | 104.25 | 4,761.05 | -147.53 | -97.09 | -147.53 | 0.34 | 0.00 | -10.34 |
| 4,869.00 | 1.06 | 201.06 | 4,855.03 | -148.72 | -95.89 | -148.72 | 2.44 | -0.90 | 102.99 |

| | | | |
|------------------|-----------------------------|-------------------------------------|--------------------------------------|
| Company: | US ROCKIES REGION PLANNING | Local Co-ordinate Reference: | Well GITTLEIN 29N-28HZ |
| Project: | COLORADO NORTHERN ZONE - 83 | TVD Reference: | GL 4911 & KB 25 @ 4936.00ft (HP 311) |
| Site: | GITTLEIN 36-33HZ PAD | MD Reference: | GL 4911 & KB 25 @ 4936.00ft (HP 311) |
| Well: | GITTLEIN 29N-28HZ | North Reference: | True |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | Database: | Denver Sales Office |

| Survey | | | | | | | | | |
|------------------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 4,964.00 | 1.13 | 257.75 | 4,950.02 | -149.74 | -97.12 | -149.74 | 1.10 | 0.07 | 59.67 |
| 5,058.00 | 1.38 | 268.01 | 5,044.00 | -149.98 | -99.15 | -149.98 | 0.36 | 0.27 | 10.91 |
| 5,153.00 | 1.83 | 256.53 | 5,138.96 | -150.37 | -101.77 | -150.37 | 0.58 | 0.47 | -12.08 |
| 5,247.00 | 1.99 | 270.12 | 5,232.91 | -150.72 | -104.86 | -150.72 | 0.51 | 0.17 | 14.46 |
| 5,342.00 | 1.59 | 278.85 | 5,327.86 | -150.51 | -107.82 | -150.51 | 0.51 | -0.42 | 9.19 |
| 5,436.00 | 2.12 | 308.37 | 5,421.81 | -149.23 | -110.47 | -149.23 | 1.14 | 0.56 | 31.40 |
| 5,530.00 | 2.28 | 311.46 | 5,515.74 | -146.92 | -113.23 | -146.92 | 0.21 | 0.17 | 3.29 |
| 5,625.00 | 1.25 | 330.97 | 5,610.70 | -144.76 | -115.15 | -144.76 | 1.24 | -1.08 | 20.54 |
| 5,719.00 | 1.63 | 337.88 | 5,704.67 | -142.62 | -116.15 | -142.62 | 0.44 | 0.40 | 7.35 |
| 5,814.00 | 0.54 | 141.91 | 5,799.66 | -141.72 | -116.39 | -141.72 | 2.27 | -1.15 | 172.66 |
| 5,908.00 | 0.81 | 157.68 | 5,893.65 | -142.69 | -115.86 | -142.69 | 0.35 | 0.29 | 16.78 |
| 6,002.00 | 0.88 | 162.53 | 5,987.64 | -143.99 | -115.39 | -143.99 | 0.11 | 0.07 | 5.16 |
| 6,097.00 | 1.38 | 67.46 | 6,082.63 | -144.25 | -114.11 | -144.25 | 1.79 | 0.53 | -100.07 |
| 6,191.00 | 1.11 | 66.67 | 6,176.61 | -143.45 | -112.23 | -143.45 | 0.29 | -0.29 | -0.84 |
| 6,285.00 | 1.26 | 48.25 | 6,270.59 | -142.40 | -110.63 | -142.40 | 0.43 | 0.16 | -19.60 |
| 6,380.00 | 1.11 | 60.13 | 6,365.57 | -141.25 | -109.05 | -141.25 | 0.30 | -0.16 | 12.51 |
| 6,474.00 | 1.50 | 20.32 | 6,459.54 | -139.64 | -107.83 | -139.64 | 1.02 | 0.41 | -42.35 |
| 6,521.00 | 4.33 | 0.24 | 6,506.48 | -137.29 | -107.61 | -137.29 | 6.31 | 6.02 | -42.72 |
| 6,568.00 | 8.53 | 357.85 | 6,553.17 | -132.03 | -107.73 | -132.03 | 8.95 | 8.94 | -5.09 |
| 6,615.00 | 14.70 | 3.22 | 6,599.19 | -122.59 | -107.53 | -122.59 | 13.31 | 13.13 | 11.43 |
| 6,662.00 | 20.08 | 359.76 | 6,644.03 | -108.55 | -107.23 | -108.55 | 11.65 | 11.45 | -7.36 |
| 6,709.00 | 25.13 | 352.96 | 6,687.41 | -90.57 | -108.49 | -90.57 | 12.08 | 10.74 | -14.47 |
| 6,756.00 | 29.09 | 349.05 | 6,729.24 | -69.43 | -111.88 | -69.43 | 9.24 | 8.43 | -8.32 |
| 6,803.00 | 33.18 | 352.57 | 6,769.46 | -45.45 | -115.72 | -45.45 | 9.52 | 8.70 | 7.49 |
| 6,851.00 | 39.49 | 354.44 | 6,808.11 | -17.21 | -118.90 | -17.21 | 13.35 | 13.15 | 3.90 |
| 6,898.00 | 45.16 | 355.03 | 6,842.85 | 14.29 | -121.79 | 14.29 | 12.09 | 12.06 | 1.26 |
| 6,945.00 | 48.86 | 356.77 | 6,874.89 | 48.58 | -124.23 | 48.58 | 8.32 | 7.87 | 3.70 |
| 6,992.00 | 54.01 | 357.85 | 6,904.18 | 85.27 | -125.95 | 85.27 | 11.10 | 10.96 | 2.30 |
| 7,039.00 | 60.03 | 357.83 | 6,929.75 | 124.65 | -127.43 | 124.65 | 12.81 | 12.81 | -0.04 |
| 7,086.00 | 64.79 | 2.07 | 6,951.52 | 166.28 | -127.43 | 166.28 | 12.90 | 10.13 | 9.02 |
| 7,133.00 | 66.96 | 4.93 | 6,970.74 | 209.09 | -124.81 | 209.09 | 7.22 | 4.62 | 6.09 |
| 7,180.00 | 68.38 | 3.58 | 6,988.59 | 252.44 | -121.58 | 252.44 | 4.02 | 3.02 | -2.87 |
| 7,228.00 | 72.32 | 2.72 | 7,004.73 | 297.57 | -119.10 | 297.57 | 8.38 | 8.21 | -1.79 |
| 7,275.00 | 77.60 | 2.32 | 7,016.92 | 342.90 | -117.11 | 342.90 | 11.26 | 11.23 | -0.85 |
| 7,322.00 | 79.36 | 1.18 | 7,026.31 | 388.93 | -115.71 | 388.93 | 4.44 | 3.74 | -2.43 |
| 7,369.00 | 80.95 | 1.01 | 7,034.35 | 435.23 | -114.82 | 435.23 | 3.40 | 3.38 | -0.36 |
| 7,416.00 | 84.16 | 1.22 | 7,040.44 | 481.82 | -113.91 | 481.82 | 6.84 | 6.83 | 0.45 |
| 7,447.00 | 86.88 | 1.07 | 7,042.86 | 512.71 | -113.30 | 512.71 | 8.79 | 8.77 | -0.48 |
| 7,490.00 | 87.87 | 1.03 | 7,044.83 | 555.66 | -112.51 | 555.66 | 2.30 | 2.30 | -0.09 |
| 7" (745 FSL 1951 FWL) | | | | | | | | | |
| 7,513.00 | 88.40 | 1.01 | 7,045.57 | 578.64 | -112.10 | 578.64 | 2.30 | 2.30 | -0.09 |
| 7,530.00 | 89.56 | 1.73 | 7,045.88 | 595.64 | -111.69 | 595.64 | 8.03 | 6.82 | 4.24 |
| 7,621.00 | 90.00 | 0.86 | 7,046.23 | 686.61 | -109.64 | 686.61 | 1.07 | 0.48 | -0.96 |

| | | | |
|------------------|-----------------------------|-------------------------------------|--------------------------------------|
| Company: | US ROCKIES REGION PLANNING | Local Co-ordinate Reference: | Well GITTLEIN 29N-28HZ |
| Project: | COLORADO NORTHERN ZONE - 83 | TVD Reference: | GL 4911 & KB 25 @ 4936.00ft (HP 311) |
| Site: | GITTLEIN 36-33HZ PAD | MD Reference: | GL 4911 & KB 25 @ 4936.00ft (HP 311) |
| Well: | GITTLEIN 29N-28HZ | North Reference: | True |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | Database: | Denver Sales Office |

| Survey | | | | | | | | | |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 7,713.00 | 90.00 | 0.47 | 7,046.23 | 778.61 | -108.57 | 778.61 | 0.42 | 0.00 | -0.42 |
| 7,805.00 | 90.94 | 0.18 | 7,045.47 | 870.60 | -108.05 | 870.60 | 1.07 | 1.02 | -0.32 |
| 7,896.00 | 91.88 | 359.05 | 7,043.23 | 961.57 | -108.66 | 961.57 | 1.61 | 1.03 | -1.24 |
| 7,986.00 | 91.04 | 359.10 | 7,040.94 | 1,051.53 | -110.11 | 1,051.53 | 0.93 | -0.93 | 0.06 |
| 8,077.00 | 89.33 | 359.75 | 7,040.65 | 1,142.52 | -111.02 | 1,142.52 | 2.01 | -1.88 | 0.71 |
| 8,168.00 | 89.87 | 359.56 | 7,041.28 | 1,233.51 | -111.57 | 1,233.51 | 0.63 | 0.59 | -0.21 |
| 8,260.00 | 90.37 | 358.01 | 7,041.09 | 1,325.49 | -113.52 | 1,325.49 | 1.77 | 0.54 | -1.68 |
| 8,352.00 | 90.91 | 359.41 | 7,040.06 | 1,417.46 | -115.59 | 1,417.46 | 1.63 | 0.59 | 1.52 |
| 8,443.00 | 91.04 | 0.17 | 7,038.51 | 1,508.44 | -115.93 | 1,508.44 | 0.85 | 0.14 | 0.84 |
| 8,534.00 | 91.62 | 1.10 | 7,036.40 | 1,599.41 | -114.92 | 1,599.41 | 1.20 | 0.64 | 1.02 |
| 8,626.00 | 91.38 | 0.38 | 7,033.99 | 1,691.37 | -113.73 | 1,691.37 | 0.82 | -0.26 | -0.78 |
| 8,718.00 | 90.84 | 1.68 | 7,032.21 | 1,783.34 | -112.08 | 1,783.34 | 1.53 | -0.59 | 1.41 |
| 8,809.00 | 89.73 | 1.52 | 7,031.76 | 1,874.30 | -109.54 | 1,874.30 | 1.23 | -1.22 | -0.18 |
| 8,901.00 | 90.20 | 1.40 | 7,031.81 | 1,966.27 | -107.19 | 1,966.27 | 0.53 | 0.51 | -0.13 |
| 8,992.00 | 89.53 | 1.15 | 7,032.03 | 2,057.25 | -105.17 | 2,057.25 | 0.79 | -0.74 | -0.27 |
| 9,084.00 | 88.99 | 0.46 | 7,033.22 | 2,149.23 | -103.88 | 2,149.23 | 0.95 | -0.59 | -0.75 |
| 9,176.00 | 88.75 | 0.04 | 7,035.03 | 2,241.21 | -103.47 | 2,241.21 | 0.53 | -0.26 | -0.46 |
| 9,267.00 | 88.59 | 359.27 | 7,037.14 | 2,332.18 | -104.02 | 2,332.18 | 0.86 | -0.18 | -0.85 |
| 9,359.00 | 89.06 | 359.26 | 7,039.03 | 2,424.15 | -105.20 | 2,424.15 | 0.51 | 0.51 | -0.01 |
| 9,451.00 | 91.61 | 0.42 | 7,038.49 | 2,516.14 | -105.46 | 2,516.14 | 3.05 | 2.77 | 1.26 |
| 9,543.00 | 90.17 | 0.25 | 7,037.06 | 2,608.13 | -104.92 | 2,608.13 | 1.58 | -1.57 | -0.18 |
| 9,635.00 | 91.11 | 359.97 | 7,036.03 | 2,700.12 | -104.74 | 2,700.12 | 1.07 | 1.02 | -0.30 |
| 9,726.00 | 91.21 | 1.12 | 7,034.19 | 2,791.10 | -103.88 | 2,791.10 | 1.27 | 0.11 | 1.26 |
| 9,818.00 | 88.42 | 0.97 | 7,034.49 | 2,883.07 | -102.20 | 2,883.07 | 3.04 | -3.03 | -0.16 |
| 9,910.00 | 88.86 | 0.83 | 7,036.67 | 2,975.03 | -100.76 | 2,975.03 | 0.50 | 0.48 | -0.15 |
| 10,005.00 | 88.92 | 0.57 | 7,038.51 | 3,070.01 | -99.60 | 3,070.01 | 0.28 | 0.06 | -0.27 |
| 10,099.00 | 91.04 | 0.21 | 7,038.55 | 3,164.00 | -98.96 | 3,164.00 | 2.29 | 2.26 | -0.38 |
| 10,194.00 | 91.38 | 358.43 | 7,036.54 | 3,258.97 | -100.08 | 3,258.97 | 1.91 | 0.36 | -1.87 |
| 10,288.00 | 92.08 | 0.78 | 7,033.70 | 3,352.92 | -100.73 | 3,352.92 | 2.61 | 0.74 | 2.50 |
| 10,383.00 | 91.71 | 2.18 | 7,030.56 | 3,447.83 | -98.28 | 3,447.83 | 1.52 | -0.39 | 1.47 |
| 10,477.00 | 90.54 | 1.49 | 7,028.71 | 3,541.76 | -95.27 | 3,541.76 | 1.44 | -1.24 | -0.73 |
| 10,571.00 | 90.94 | 0.99 | 7,027.50 | 3,635.73 | -93.24 | 3,635.73 | 0.68 | 0.43 | -0.53 |
| 10,666.00 | 90.20 | 0.39 | 7,026.55 | 3,730.72 | -92.09 | 3,730.72 | 1.00 | -0.78 | -0.63 |
| 10,760.00 | 89.26 | 358.95 | 7,027.00 | 3,824.71 | -92.63 | 3,824.71 | 1.83 | -1.00 | -1.53 |
| 10,854.00 | 89.46 | 357.60 | 7,028.05 | 3,918.66 | -95.46 | 3,918.66 | 1.45 | 0.21 | -1.44 |
| 10,949.00 | 89.02 | 357.29 | 7,029.31 | 4,013.56 | -99.70 | 4,013.56 | 0.57 | -0.46 | -0.33 |
| 11,043.00 | 89.43 | 358.31 | 7,030.58 | 4,107.48 | -103.31 | 4,107.48 | 1.17 | 0.44 | 1.09 |
| 11,138.00 | 89.19 | 358.88 | 7,031.72 | 4,202.44 | -105.63 | 4,202.44 | 0.65 | -0.25 | 0.60 |
| 11,232.00 | 88.63 | 359.89 | 7,033.51 | 4,296.42 | -106.64 | 4,296.42 | 1.23 | -0.60 | 1.07 |
| 11,326.00 | 88.56 | 359.62 | 7,035.82 | 4,390.39 | -107.05 | 4,390.39 | 0.30 | -0.07 | -0.29 |
| 11,420.00 | 88.59 | 359.65 | 7,038.15 | 4,484.36 | -107.64 | 4,484.36 | 0.05 | 0.03 | 0.03 |
| 11,515.00 | 89.20 | 0.81 | 7,039.99 | 4,579.34 | -107.26 | 4,579.34 | 1.38 | 0.64 | 1.22 |
| 11,609.00 | 89.30 | 0.29 | 7,041.22 | 4,673.33 | -106.36 | 4,673.33 | 0.56 | 0.11 | -0.55 |

| | | | |
|------------------|-----------------------------|-------------------------------------|--------------------------------------|
| Company: | US ROCKIES REGION PLANNING | Local Co-ordinate Reference: | Well GITTLEIN 29N-28HZ |
| Project: | COLORADO NORTHERN ZONE - 83 | TVD Reference: | GL 4911 & KB 25 @ 4936.00ft (HP 311) |
| Site: | GITTLEIN 36-33HZ PAD | MD Reference: | GL 4911 & KB 25 @ 4936.00ft (HP 311) |
| Well: | GITTLEIN 29N-28HZ | North Reference: | True |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | Database: | Denver Sales Office |

| Survey | | | | | | | | | |
|---------------------------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 11,703.00 | 90.30 | 0.32 | 7,041.54 | 4,767.32 | -105.86 | 4,767.32 | 1.06 | 1.06 | 0.03 |
| 11,798.00 | 90.57 | 0.52 | 7,040.82 | 4,862.32 | -105.16 | 4,862.32 | 0.35 | 0.28 | 0.21 |
| 11,892.00 | 90.20 | 359.66 | 7,040.19 | 4,956.32 | -105.02 | 4,956.32 | 1.00 | -0.39 | -0.91 |
| 11,987.00 | 90.10 | 1.14 | 7,039.94 | 5,051.31 | -104.35 | 5,051.31 | 1.56 | -0.11 | 1.56 |
| 12,081.00 | 90.77 | 0.64 | 7,039.23 | 5,145.30 | -102.89 | 5,145.30 | 0.89 | 0.71 | -0.53 |
| 12,176.00 | 89.87 | 358.76 | 7,038.70 | 5,240.29 | -103.39 | 5,240.29 | 2.19 | -0.95 | -1.98 |
| 12,270.00 | 88.82 | 359.42 | 7,039.77 | 5,334.27 | -104.88 | 5,334.27 | 1.32 | -1.12 | 0.70 |
| 12,365.00 | 89.23 | 357.47 | 7,041.39 | 5,429.21 | -107.46 | 5,429.21 | 2.10 | 0.43 | -2.05 |
| 12,459.00 | 89.30 | 358.90 | 7,042.60 | 5,523.16 | -110.44 | 5,523.16 | 1.52 | 0.07 | 1.52 |
| 12,554.00 | 89.87 | 359.65 | 7,043.28 | 5,618.15 | -111.64 | 5,618.15 | 0.99 | 0.60 | 0.79 |
| 12,648.00 | 88.93 | 1.33 | 7,044.27 | 5,712.13 | -110.84 | 5,712.13 | 2.05 | -1.00 | 1.79 |
| 12,742.00 | 89.73 | 0.78 | 7,045.37 | 5,806.11 | -109.11 | 5,806.11 | 1.03 | 0.85 | -0.59 |
| 12,837.00 | 91.00 | 359.78 | 7,044.76 | 5,901.10 | -108.64 | 5,901.10 | 1.70 | 1.34 | -1.05 |
| 12,931.00 | 90.94 | 1.49 | 7,043.17 | 5,995.08 | -107.60 | 5,995.08 | 1.82 | -0.06 | 1.82 |
| 13,026.00 | 89.13 | 2.40 | 7,043.11 | 6,090.02 | -104.38 | 6,090.02 | 2.13 | -1.91 | 0.96 |
| 13,120.00 | 90.20 | 2.55 | 7,043.66 | 6,183.93 | -100.32 | 6,183.93 | 1.15 | 1.14 | 0.16 |
| 13,214.00 | 90.61 | 0.59 | 7,043.00 | 6,277.89 | -97.74 | 6,277.89 | 2.13 | 0.44 | -2.09 |
| 13,309.00 | 90.13 | 1.63 | 7,042.38 | 6,372.87 | -95.90 | 6,372.87 | 1.21 | -0.51 | 1.09 |
| 13,403.00 | 88.08 | 4.21 | 7,043.85 | 6,466.72 | -91.11 | 6,466.72 | 3.51 | -2.18 | 2.74 |
| 13,497.00 | 88.48 | 4.07 | 7,046.67 | 6,560.43 | -84.33 | 6,560.43 | 0.45 | 0.43 | -0.15 |
| 13,592.00 | 89.46 | 4.42 | 7,048.38 | 6,655.15 | -77.30 | 6,655.15 | 1.10 | 1.03 | 0.37 |
| 13,686.00 | 89.80 | 3.15 | 7,048.99 | 6,748.95 | -71.10 | 6,748.95 | 1.40 | 0.36 | -1.35 |
| 13,780.00 | 89.76 | 2.41 | 7,049.35 | 6,842.83 | -66.54 | 6,842.83 | 0.79 | -0.04 | -0.79 |
| 13,874.00 | 90.00 | 1.69 | 7,049.55 | 6,936.77 | -63.17 | 6,936.77 | 0.81 | 0.26 | -0.77 |
| 13,968.00 | 89.46 | 359.55 | 7,049.99 | 7,030.76 | -62.16 | 7,030.76 | 2.35 | -0.57 | -2.28 |
| 14,063.00 | 90.50 | 359.93 | 7,050.02 | 7,125.76 | -62.59 | 7,125.76 | 1.17 | 1.09 | 0.40 |
| 14,094.00 | 91.18 | 359.35 | 7,049.57 | 7,156.75 | -62.78 | 7,156.75 | 2.88 | 2.19 | -1.87 |
| LAST SDI MWD PRODUCTION SURVEY | | | | | | | | | |
| 14,164.00 | 91.18 | 359.35 | 7,048.13 | 7,226.73 | -63.58 | 7,226.73 | 0.00 | 0.00 | 0.00 |
| SDI PROJECTION TO TD | | | | | | | | | |

| Design Targets | | | | | | | | | |
|---|---------------|--------------|----------|------------|------------|-----------------|----------------|------------|--------------|
| Target Name | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (usft) | Easting (usft) | Latitude | Longitude |
| PBHL_GITTLEIN 29N-28HZ | 0.00 | 0.00 | 7,036.00 | 7,251.69 | -103.21 | 1,283,365.06 | 3,231,798.37 | 40.1082560 | -104.6712750 |
| - hit/miss target | | | | | | | | | |
| - Shape | | | | | | | | | |
| - actual wellpath misses target center by 48.39ft at 14164.00ft MD (7048.13 TVD, 7226.73 N, -63.58 E) | | | | | | | | | |
| - Point | | | | | | | | | |

| | | | |
|------------------|-----------------------------|-------------------------------------|--------------------------------------|
| Company: | US ROCKIES REGION PLANNING | Local Co-ordinate Reference: | Well GITTLEIN 29N-28HZ |
| Project: | COLORADO NORTHERN ZONE - 83 | TVD Reference: | GL 4911 & KB 25 @ 4936.00ft (HP 311) |
| Site: | GITTLEIN 36-33HZ PAD | MD Reference: | GL 4911 & KB 25 @ 4936.00ft (HP 311) |
| Well: | GITTLEIN 29N-28HZ | North Reference: | True |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | Database: | Denver Sales Office |

| Casing Points | | | | | |
|---------------------|---------------------|-----------------------|--|----------------------|--------------------|
| Measured Depth (ft) | Vertical Depth (ft) | Name | | Casing Diameter (in) | Hole Diameter (in) |
| 1,326.00 | 1,325.98 | 9 5/8" | | 9.625 | 12.250 |
| 7,490.00 | 7,044.83 | 7" (745 FSL 1951 FWL) | | 7.000 | 7.500 |

| Design Annotations | | | | | |
|---------------------|---------------------|-------------------|------------|---------------------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates | | Comment | |
| | | +N/-S (ft) | +E/-W (ft) | | |
| 100.00 | 100.00 | -0.22 | 0.12 | FIRST MS GYRO SURVEY | |
| 1,140.00 | 1,139.99 | -3.03 | 0.05 | LAST MS GYRO SURVEY | |
| 1,414.00 | 1,413.98 | -1.61 | 0.09 | FIRST SDI MWD PRODUCTION SURVEY | |
| 14,094.00 | 7,049.57 | 7,156.75 | -62.78 | LAST SDI MWD PRODUCTION SURVEY | |
| 14,164.00 | 7,048.13 | 7,226.73 | -63.58 | SDI PROJECTION TO TD | |

Checked By: _____ Approved By: _____ Date: _____